Klamath Bird Observatory Census Effort Report: 2004 Spring and Fall Effort Summary

Jaime L. Stephens, Sherri L. Kies and John D. Alexander
Klamath Bird Observatory
Ashland, Oregon

Introduction

In 2004, the Klamath Bird Observatory (KBO) and U.S. Forest Service's Redwood Sciences Laboratory continued implementing bird and habitat monitoring efforts in Southwest Oregon and Northern California. These efforts represent an extensive partnerships with the involvement of many cooperators including: Oregon-Washington and California Partners In Flight; Southern Oregon University; Oregon State University; University of California at Davis; Bureau of Land Management (BLM) Oregon State Office and Medford, Lakeview and Susanville Districts; National Park Service's Klamath Network Inventory and Monitoring Program; Crater Lake National Park; Oregon Caves and Lava Beds National Monuments; Klamath, Rogue-Siskiyou and Fremont-Winema National Forests; Bureau of Reclamation; Joint Fire Sciences Program; Jackson County, Oregon; Ashland Public Schools; City of Ashland; World Wildlife Fund; Applegate River Watershed Council; PRBO Conservation Science; and others.

The objectives of this program are: (1) to collect data that provide an index to species diversity and abundance in riparian and upland habitats; (2) to evaluate the population health of Neotropical migratory and resident birds; (3) to maintain a long term monitoring effort for tracking landbird population trends (4) to investigate the effects of wildfire and fuels treatments on birds and their habitats; and (5) to investigate the effects of grazing on birds and their habitats. This report provides a brief summary of our 2004 monitoring efforts in Southwestern Oregon and Northern California.

Bird and Habitat Surveys

In 2004 KBO continued to conduct bird census and habitat surveys in Southwestern Oregon and Northern California. Standard point count and area search census methodologies were used during breeding and dispersal/migration seasons respectively, and standard vegetation monitoring techniques were followed. (Ralph et al. 1993).

Extensive Breeding Bird Census

One of the objectives of Partners In Flight's Monitoring Working Group, and the North American Bird Conservation Initiative's proposed Coordinated Bird Monitoring Program is to track long-term bird population trends. KBO contributes to this objective by conducting

point count surveys on long-term Breeding Bird Survey (BBS) routes, at constant effort mist netting sites (CES), and along additional Klamath Demographic Monitoring Network census routes (Table 1).

Joint Fire Sciences

As part of our Joint Fire Sciences program, we continued with a third year of monitoring in association with BLM Medford District's fuels treatment projects in oak woodlands of the Applegate Valley (Table 1). We also continued our third year of post wildfire monitoring associated with the Quartz Fire in the Applegate Valley. During this effort we are revisiting sites that were established in the spring of 2001; nearly 60 of these sites burned after that wildfire ignited later that summer.

KBO completed a third year of monitoring in association with the Klamath National Forest fuels treatment projects (Table 1). In addition, we continued monitoring the ecological effects of fuels treatments in the Upper Klamath Basin. We collected data in association with several BLM juniper control units in the Basin and have pre- and post-treatment data in these areas. In conjunction with PRBO Conservation Science and the BLM Susanville District, KBO completed surveys in areas of planned juniper removal near Eagle Lake in Northeast California. We collected data along routes within and adjacent to controlled burn projects at Crater Lake National Park in spring, and at Lava Beds National Monument in both spring and fall (Table 2). Data collected as part of this effort included before and after treatment application surveys. We continued a project to monitor the effects of thinning in aspen stands on the Klamath Marsh National Wildlife Refuge and collected pre-treatment data during spring and fall.

This was the first year of a project in the Ashland Watershed completed in conjunction with the Rogue-Siskiyou National Forest's Ashland Ranger District and the City of Ashland. KBO conducted point count and vegetation surveys prior to fuels reduction treatments planned for Wildland Urban Interface Units and the Research Natural Area (Table 1). Similarly, we conducted bird and habitat surveys in planned fuels reduction treatment units near Rocky Point in conjunction with the Winema-Fremont National Forest's Klamath Falls Ranger District.

Grazing Utilization Study

Working with the World Wildlife Fund and Medford District of the BLM, in cooperation with Oregon State University, University of California at Davis, and others, KBO is taking a lead role in a multi-taxa study investigating the influence of grazing on items of biological interest within the Cascade Siskiyou National Monument. In addition to conducting bird and habitat surveys within the Monument (Table 1), we completed surveys using a livestock utilization vegetation monitoring protocol on transects associated with our bird census survey routes (Alexander et al. 2003).

Wetland Rehabilitation

In 2004, KBO expanded our monitoring efforts at the BLM's Wood River Wetland restoration project, to include additional point count census routes that were established by BLM personnel (Table 1). The complimentary data collected at this important area, and as part of our broad-scale long-term monitoring program in the Upper Klamath Basin, will continue to provide valuable information about the effectiveness of wetland rehabilitation efforts at Wood River.

Conclusion

In 2004 the Klamath Bird Observatory continued working with our partners to maintain an Oregon-Washington and California Partners in Flight long-term monitoring program that fulfills monitoring objectives set forth by the National Partners in Flight Monitoring Working Group. We conducted bird census and habitat surveys for long-term monitoring efforts and avian inventory, as well as in conjunction with studies addressing the relationship between birds and grazing, fire, fuel reduction and wetland restoration. During the spring breeding season, KBO surveyed 191 routes including 2817 stations and 258 visits, for a total of 3823 point count censuses completed in 2004 (Table 1). In addition, KBO surveyed 20 routes including 108 stations and 28 visits, totaling 180 fall area search surveys completed during the dispersal and migration season of 2004 (Table 2).

Table 1. KBO bird and habitat census effort during spring of 2004. [Type:LT = long-term trend censuses, JFS = Joint Fire Sciences, GR = Cascade Siskiyou National Monument; Spring Stations = number of stations surveyed during spring visits; Spring Visits = number of route visits during spring; Spring Surveys = Total number of censuses during spring]

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Breeding Bird Survey	BALD MT	Bald Mountain	LT	50	1	50
	BARTLE	Bartle	LT	50	1	50
	MEDICINE MT	Medicine Mountain	LT	50	1	50
	MERRILL	Merrill	LT	50	1	50
	PAUNINA	Paunina	LT	50	1	50
	TIONESTA	Tionesta	LT	50	1	50
Subtotal	6			300	6	300
Constant Effort Mist Netting	7MIL	Seven Mile	LT	3	1	3
Upper Klamath Basin	CABN	Cabin	LT	4	1	4
	GERB	Gerber	LT	2	1	2
	JOHN	Johnson Creek	LT	5	1	5
	ODES	Odessa Creek	LT	4	1	4
	TOPS	Topsy	LT	4	1	4
	WILL	Williamson River	LT	4	1	4
	WOOD	Wood River	LT	4	1	4
Subtotal	8			30	8	30
Constant Effort Mist Netting	HAMI	Hamilton Pond	LT	4	1	4
Redwood Sciences Laboratory	HOCK	Hocker Flat	LT	5	1	5
	INVA	Indian Valley	LT	4	1	4
	REBA	Reddings Bar	LT	5	1	5
	SBRR	Steel Bridge River Right	LT	5	1	5
	SFRD	Steiner Flat Road	LT	5	1	5
	SVEN	Sven Obertson	LT	5	1	5
Subtotal	7			33	7	33

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Constant Effort Mist Netting						
Klamath National Forest	ANT1	Antelope Creek	LT	3	1	3
Subtotal	1			3	1	3
Constant Effort Mist Netting (CES) and Long-term Monitoring	WIWI	Willow Wind (CES)	LT	4	1	4
Klamath Bird Observatory	BIKE	Bike Trail	LT	13	1	13
Subtotal	2			17	2	17
Constant Effort Mistnetting	SNCO	Snow Cow	LT	6	1	6
Medford BLM	WIIM	Wildlife Images	LT	5	1	5
Subtotal	2			11	2	11
Powers	CLNY	Clear Y	LT	9	1	9
	CLNZ	Clear Z	LT	10	1	10
Subtotal	2			19	2	19
Upper Klamath	AGLA	Agency Lake	LT	17	1	17
	CANU	Canoe	LT	19	1	19
	CHICKB	Chicken Hill B	LT	15	1	15
	CHICKC	Chicken Hill C	LT	25	1	25
	GERBER	Gerber Reservoir	LT	25	1	25
	MAEG	Mare's Egg	LT	22	1	22
	PEBA	Pelican Bay	LT	23	1	23
	SOBU	Solomon Butte	LT	15	1	15
	SPCR	Spencer Creek	LT	22	1	22
	STMT	Stukel Mountain	LT	25	1	25
	SURD	Surveyor Mountain D	LT	20	1	20
	SURE	Surveyor Mountain E	LT	20	1	20
	SUVA	Surveyor Mountain A	LT	25	1	25
	TOPSY	Topsy	LT	15	1	15
Subtotal	14			288	14	288

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Joint Fire Sciences	BOB2/BOB3	Buncom 2/Buncom 3	JFS	13	1	13
BLM Oak Woodlands	BOB4	Buncom 4	JFS	8	1	8
	CHI1	China Gulch	JFS	15	1	15
	DEM2/DEM3	Deming Gulch 2/Deming Gulch 3	JFS	16	1	16
	ECA2	Eagle Canyon 2	JFS	9	1	9
	GEO1	George Block Gulch 1	JFS	16	1	16
	MCOR/STEA	McCormick Gulch/Sterling Mine	JFS	14	1	14
	MCOR/STEB	McCormick Gulch/Sterling Mine	JFS	15	1	15
	PMA1	Poorman's Creek 1	JFS	12	1	12
	WAT2/WATG	Water Gulch/Water Gulch 2	JFS	16	1	16
Subtotal	10			134	10	134
Joint Fire Sciences	230	Road 230	JFS	18	1	18
Quartz Fire	500	Road 500	JFS	20	1	20
	550	Road 550	JFS	20	1	20
	600	Road 600	JFS	18	1	18
	7MLA	Seven Mile Trail	JFS	15	1	15
	DUGA	Duncan Gap	JFS	20	1	20
	DUTC	Dutchman Ridge	JFS	15	1	15
	KEME	Kenney Meadows	JFS	18	1	18
	LIKA	Lick Gulch A	JFS	16	1	16
	LIKB	Lick Gulch B	JFS	20	1	20
	PCT	Pacific Crest Trail	JFS	16	1	16
	SKAT	Skate Gulch Road	JFS	18	1	18
	SKAW	Skate Gulch Walk	JFS	16	1	16
	TRMO	Trillium Mountain	JFS	13	1	13
	WRAN	Wrangle Camp	JFS	15	1	15
Subtotal	15			258	15	258

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Joint Fire Sciences	2NDV	Second Valley	JFS	14	2	28
Klamath National Forest	BEAR	Bear	JFS	18	2	36
	BEAR/MYGU	Bear/Myrtle Gulch	JFS	20	2	40
	BLUE	Blue Jay Ridge	JFS	20	2	40
	BOCR	Boulder Creek	JFS	20	2	40
	BUMB	Bumblebee Creek	JFS	17	2	34
	FRNK	Franklin Gulch	JFS	16	2	32
	GNB	Goose Nest B	JFS	30	1	30
	HUNA	Hungry Creek A	JFS	18	2	36
	HUNB	Hungry Creek B	JFS	15	2	30
	INSC	Indian Scotty	JFS	15	2	30
	LBLD	Little Baldy	JFS	19	2	38
	MCGU	McGuffy Trail	JFS	18	2	36
	NOLG	Nollan's Gulch	JFS	20	2	40
	OKA	Oak Knoll A	JFS	30	2	60
	SBM1	Scott Bar Mountain 1	JFS	18	2	36
	SBM2	Scott Bar Mountain 2	JFS	16	2	32
	SBM3	Scott Bar Mountain 3	JFS	15	2	30
	SBPO	Scott Bar Pond	JFS	15	2	30
	SCA	Scott River A	JFS	30	2	60
	SCB	Scott River B	JFS	30	2	60
	SKEL	South Fork Kelsey Creek	JFS	20	2	40
	SODA	Soda Creek A	JFS	15	2	30
	SODB	Soda Creek B	JFS	18	2	36
	TOMM	Tomm Martin	JFS	14	2	28
	WFRK	West Fork	JFS	19	2	38
Subtotal	26			500	51	970

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Joint Fire Sciences	250	Fox Lake	JFS	12	1	12
Upper Klamath	ANCR	Antelope Creek1	JFS	15	1	15
	BAVA/NOSP	Barnes Valley/Norcross Spring	JFS	9	1	9
	BRMO	Bryant Mountain	JFS	15	1	15
	BUCK2	Buck Butte 2	JFS	12	1	12
	BUHE	Bump Head 1	JFS	12	1	12
	BUMP	Bump Head 2	JFS	12	1	12
	CARE	Campbell Reservoir	JFS	12	1	12
	DRYP	Dry Prairie	JFS	12	1	12
	HARP	Harpoldt	JFS	12	1	12
	JSPR	Jenny Springs	JFS	12	1	12
	KIGO	Kilgore	JFS	12	1	12
	LORE	Lorella	JFS	10	1	10
	LORI	Lorella Ridge	JFS	12	1	12
	MWRE/DEVA	Mid-Way Reservoir/Devaul	JFS	6	1	6
	NOBR	North Bryant	JFS	12	1	12
	SCVA	Schnipps Valley	JFS	9	1	9
	SISP/SQPO	Silent Spring/Square Pond	JFS	12	1	12
	SODS	South Duncan Spring	JFS	12	1	12
	STUP	Stukel Upland	JFS	12	1	12
	WARS	Wagon Road Spring	JFS	12	1	12
	WIND	Windy Ridge	JFS	12	1	12
	WVDJ/WVSA	Willow Valley Dense Juniper/Sage	JFS	11	1	11
Subtotal	23			267	23	267
Joint Fire Sciences	STBEA	Stone's Bengard Subset "A"	JFS	10	2	20
Point Reyes Bird Observatory	STBEB	Stone's Bengard Subset "B"	JFS	10	2	20
	STBEC	Stone's Bengard Subset "C"	JFS	10	2	20
	STBED	Stone's Bengard Subset "D"	JFS	10	2	20
Subtotal	4			40	8	80

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Joint Fire Sciences	CBU1	Caldwell Butte 1	JFS	12	1	12
Lavabeds National Monument	CLDA	Cave Loop Drive A	JFS	14	1	14
	CLDB	Cave Loop Drive B	JFS	14	1	14
	CLDC	Cave Loop Drive C	JFS	14	1	14
	SCRA	Semi Crater	JFS	12	1	12
	SEBO	Southeast Boundary	JFS	12	1	12
	SISA	Sisters A	JFS	12	1	12
	SISB	Sisters B	JFS	12	1	12
	TIN1	Tinkner Road 1	JFS	13	1	13
	TIN2	Tinkner Road 2	JFS	11	1	11
Subtotal	10			126	10	126
Joint Fire Sciences	CL20	Crater Lake 20	JFS	12	1	12
Crater Lake National Park	TIC2	Desert Creek 2	JFS	12	1	12
	TICR	Desert Creek	JFS	12	1	12
	WIC3	Wildcat Creek 3	JFS	12	1	12
	WICA	Wildcat Annie	JFS	12	1	12
	WICA2	Wildcat Annie 2	JFS	13	1	13
Subtotal	6			73	6	73
Joint Fire Sciences	4355	Road 4355	JFS	25	2	50
Klamath Marsh	7630	Road 7630	JFS	21	2	42
	7642	Road 7642	JFS	13	2	26
	3CRK/TCRI	Three Creek/Three Creek Ridge	JFS	12	2	24
	690Z/LWCZ	Road 690/ Little Wocus Bay	JFS	12	2	24
	ABF1	Abraham Flat 1	JFS	6	2	12
	KIT1/KIT2	Kittridge Cannal 1/Kittridge Cannal 2	JFS	14	2	28
	LWEL/LWEZ	Lanewell/Lanewell Z	JFS	14	2	28
	NWKM/GODB	Northwest Klamath Marsh/God Butte	JFS	10	2	20
	TPEN/WPTZ	The Penninsula/Windmill Point Z	JFS	13	2	26
Subtotal	10			140	20	280

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Joint Fire Sciences	EFAC	East Fork Ashland Creek	JFS	12	1	12
Ashland Watershed	HOGU	Horn Gulch	JFS	11	1	11
	HORN	Horn Gap	JFS	8	1	8
	PIPE	Ashland Pipeline	JFS	13	1	13
	REED	Reeder	JFS	19	1	19
	TOL1	Tolman 1	JFS	11	1	11
	TOL2	Tolman 2	JFS	12	1	12
	TOL3	Tolman 3	JFS	11	1	11
	WACR	Wagner Creek	JFS	12	1	12
Subtotal	9			109	9	109
Joint Fire Sciences Rocky Point	MASP/MASN	Malone Springs North/ Malone Springs South	JFS	12	1	12
	RECZ	Recreation Creek Z	JFS	11	1	11
	TOMA	Tomahawk Mountain	JFS	12	1	12
	VARN	Varney Creek	JFS	19	1	19
	RPTR	Rocky Point Resort	JFS	13	1	13
Subtotal	5			67	5	67

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Cascade Siskiyou	113A	Road 113 A	GR	12	2	24
National Monument	1761	Road 1761	GR	12	2	24
	536A	Road 536 A	GR	12	2	24
	585	Road 585	GR	12	2	24
	76A	Road 76 A	GR	12	2	24
	862A	Road 862 A	GR	12	2	24
	989A	Road 989 A	GR	12	2	24
	AGF1	Agate Flat 1	GR	18	2	36
	AGF2	Agate Flat 2	GR	16	2	32
	BECR	Beaver Creek	GR	12	2	24
	BOOR	Box O Ranch 1	GR	12	2	24
	BXOR	Box O Ranch 2	GR	12	2	24
	CLAY	Jerry Clayton	GR	12	2	24
	HOBL	Hobart Bluff	GR	11	2	22
	JE45	Jenny Creek 45	GR	12	2	24
	JECR	Jenny Creek	GR	12	2	24
	JECU	Jenny Creek Upland	GR	15	2	30
	JEN3	Jenny Creek 3	GR	12	2	24
	KECR	Keene Creek	GR	12	2	24
	NACO	Nancy Ames Cole	GR	14	2	28
	ORGU	Oregon Gulch	GR	17	2	34
	PALA	Parsnip Lake	GR	12	2	24
	RAPA	Randcore Pass	GR	12	2	24
	SKCO	Sky King Cole	GR	13	2	26
	SKOO	Skookum Creek	GR	12	2	24
	SOMN	Soda Mountain	GR	12	2	24
	SSPR	Soda Spring	GR	12	2	24
	TRSO	Soda Creek	GR	12	2	24
Subtotal	28			356	56	712

Table 1 continued.

Project	Route Code	Route Name	Type	Spring Stations	Spring Visits	Spring Surveys
Upper Klamath	NODM/UPWR	North Marsh/Upper Wildlife Refuge	LT	16	1	16
Wood River Wetland	PEDI/SODI/SOSP/LOWR	Petric Dike/South Dike/ South Spit/Lower Wood River	LT	16	1	16
	SMDI	Sevenmile Dike	LT	14	1	14
Subtotal	3			46	3	46
Grand Total	191			2817	258	3823

Table 2. KBO bird and habitat census effort during fall of 2004. [Type:JFS = Joint Fire Sciences; Fall Stations = number of stations surveyed during fall visits; Fall Visits = number of route visits during fall; Fall Surveys = Total number of censuses during fall]

Project	Route Code	Route Name	Type	Fall Stations	Fall Visits	Fall Surveys
Joint Fire Sciences	CLDA	Cave Loop Drive A	JFS	6	1	6
Lava Beds National Monument	CLDB	Cave Loop Drive B	JFS	6	1	6
	CLDC	Cave Loop Drive C	JFS	6	1	6
	SCRA	Semi Crater	JFS	6	1	6
	SISA	Sisters A	JFS	6	1	6
	SISB	Sisters B	JFS	6	1	6
Subtotal	10			36	6	36
Joint Fire Sciences	3CRK	Three Creek	JFS	6	2	12
Klamath Marsh	690Z	Road 690	JFS	6	2	12
	ABF1	Abraham Flat 1	JFS	6	2	12
	KIT1	Kittridge Cannal 1	JFS	6	2	12
	KIT2	Kittridge Cannal 2	JFS	8	2	16
	LWCZ	Little Wocus Bay	JFS	6	2	12
	LWEL	Lanewell	JFS	8	2	16
	LWEZ	Lanewell Z	JFS	6	2	12
	NWKM	Northwest Klamath Marsh	JFS	7	2	14
	TPEN	The Penninsula	JFS	6	2	12
	WPTZ	Windmill Point Z	JFS	7	2	14
Subtotal	10			72	22	144
Grand Total	20			108	28	180

Literature Cited

Alexander, J.D., S. Kies, P. Hosten, and S. Slavic. 2003. Study design for using methods to measure livestock utilization in the Cascade-Siskiyou National Monument. Klamath Bird Observatory, Ashland, Oregon.

Ralph, C.J., G.R. Geupel, P. Pyle, T.E. Martin, D.F. DeSante. 1993. Handbook of field methods for monitoring landbirds. United States Department of Agriculture, Forest Service, General Technical Report PSW-GTR-144.